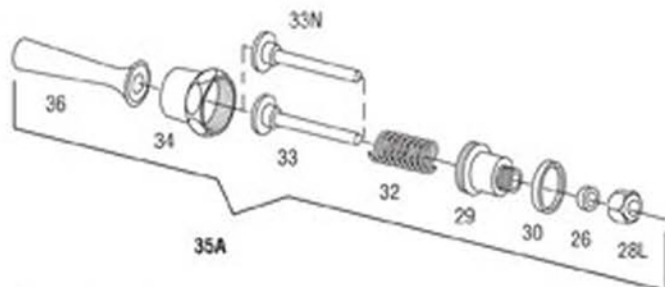


## Old Style Spring Loaded Handle



## Service Procedures

### HOW TO SERVICE VALVE

- 1) Shut off water at control stop. Trip valve to release water pressure.
- 2) Remove cover assembly by turning counterclockwise, using Delany No. 748 cover wrench, standard 1 1/4 hex box wrench, or flat jawed adjustable wrench with jaws taped to protect chrome. Inspect cover parts for possible replacement.
- 3) Place fingers on both sides of auxiliary valve seat holder and lift vertically to remove entire diaphragm operating assembly, except for main valve seat. Inspect for possible replacement of individual parts or entire assembly.
- 4) Inspect condition of main valve seat. If replacement is required, remove by turning counterclockwise with Delany No. 746 1 1/2" 12 point socket wrench. If valve is equipped with 171A or 171-4A main valve seats, remove by engaging two lugs provided with Delany No. 747 main valve seat wrench. Make sure replacement seat is wrenched tight.
- 5) If diaphragm with bypass is to be replaced as an individual part, hold diaphragm operating assembly in one hand and unscrew the seat guide from the bottom with the other hand. The diaphragm will then slip off the No. 16 diaphragm bushing. Take care to install the new diaphragm with the pinhole of the bypass on the under side. Also, take care to replace the seat guide hand tight, but firmly. Good preventive maintenance calls for simultaneous replacement of No. 8 auxiliary valve seat washer, supplied in same kit as the replacement diaphragm.
- 6) To reassemble valve, reverse all procedures outline above. After diaphragm operating assembly has been dropped into valve, run thumb around edge of diaphragm to insure it is tamped flat on shoulder at base of thread for cover.

### HOW TO SERVICE CONTROL STOP

See Renewal Parts & Service Folder SVB-3 for detailed parts information.

- 1) Shut off water supply at branch to toilet room or at cellar main, if necessary. Make sure entire line above elevation of stop is drained.
- 2) If problem is leakage at shut off stem, and previous tightening of packing nut failed to correct leakage, remove packing nut. Remove old No. 49 packing, using sharp pointed tool if necessary. Insert new packing.
- 3) Reverse above procedure to put stop back in service.
- 4) For renewal of internal parts, place flat jawed adjustable wrench on large hex bonnet. To protect chrome finish, taped jaws are recommended. Turn counterclockwise to remove bonnet assembly for inspection. Replace bonnet assembly, shut off stem assembly, or individual parts as required. Before installing assemblies, back off shut off stem by turning counterclockwise with screwdriver.
- 5) Reverse above procedure to put stop back into service.

Note: Earlier production stops were supplied with fibre bonnet washer. Most current production uses metal-to-metal joint only. If fibre bonnet washer is present, it should be replaced each time bonnet is removed.

### HOW TO SERVICE VACUUM BREAKER

See Renewal Parts & Service Folder SVB-3 for detailed parts information.

- 1) Shut off water at control stop. Trip valve to release water pressure.
- 2) Using flat jawed adjustable wrench, loosen No. 58 union nut. To protect chrome finish, taped jaws are recommended. Loosen No. 426 cow nut at vacuum breaker and slip down flush connection. Lift valve assembly clear and set aside.
- 3) Lift out No. 427A rubber sleeve for inspection and possible replacement.
- 4) To reassemble, reverse procedure. Be sure to make up No. 426 cow nut hand tight only, or use quarter turn of wrench at most.

Note: Earlier production vacuum breakers were supplied with fibre washer on top of No. 427A sleeve. Discard before reassembly.

### HOW TO SERVICE HANDLE

Also pertains to push buttons, discs, and foot pedals.

### EXPOSED VALVES

- 1) Shut off water at control stop. Trip valve to release water pressure.
- 2) Using flat jawed adjustable wrench, unscrew handle nut and remove handle assembly. To protect chrome, taped jaws are recommended.
- 3) If handle is old style spring loaded type, remove No. 28L packing nut and replace No. 26 packing washer. Also replace No. 30 coupling washer. If operating stem shows signs of wear, it is recommended that entire handle assembly be replaced.

*35A	Spring loaded handle assembly
*35A-B	Spring loaded 1/2" push button assembly
*35A-C	Spring loaded 3" oscillating disc assembly
35A-T29	Spring loaded foot pedal assembly
* 26	Packing washer
28L	Packing nut
29	Spring housing
30	Coupling washer
32	Spring
33	Operating stem (overall length 1 29/32")
33N	Operating stem (for valves with non-hold-open feature. Overall length 1 27/32")
34	Handle nut
36	Handle

\* If for use with valves containing non-hold-open feature, add suffix T5 to assembly number. Price remains the same.

If handle is Rubberflex type, inspect operating stem and No. 222-3 flexer for wear. Good preventive maintenance calls for simultaneous replacement of both parts.

- 4) To reassemble, reverse above procedures. Note that No. 28L packing nut must be tight enough to prevent leakage but loose enough to prevent binding.

### CONCEALED VALVES

- 1) Shut off water at control stop. Trip valve to release water pressure.
- 2) Loosen No. 58 union nut. Loosen No. 244 coupling nut, lift valve assembly clear and set aside.
- 3) If handle is old style spring loaded type, No. 28L packing nut will be in full view. Remove and replace No. 26 packing washer and No. 123 coupling washer. If operating stem shows signs of wear, place wrench on large hex of No. 36NS wall sleeve bushing and turn counterclockwise to remove. Operating stem and No. 125 spring will slide out of wall sleeve and both should be replaced simultaneously.  
If handle is Rubberflex type, place wrench on hex of No. 366 wall sleeve bushing and turn counterclockwise to remove. Inspect operating stem and No. 222-3 flexer for wear. Good preventive maintenance calls for simultaneous replacement of both parts.
- 4) To reassemble, reverse above procedures. Note that No. 28L packing nut must be tight enough to prevent leakage but loose enough to prevent binding.

### HOW TO REGULATE LENGTH OF FLUSH

The length of flush and consequently the amount of water consumed per flush can be readily varied by the No. 4 regulating screw in the valve cover. Remove the No. 3 cover screw and engage No. 4 regulating screw with screwdriver. Turn clockwise to lower the screw and shorten flush and counterclockwise to raise the screw and increase flushing cycle. Water consumption requirements of different fixtures vary widely. The flexibility built into Delany Valve regulation permits proper flushing action without waste of water. If valve is equipped with non-hold-open feature, or equipped with a "solid cover", no regulation is possible by means of the No. 4 part. For such valves, regulation is achieved by substitution of different sized bypasses on a trial and error basis.

### HOW TO ADJUST TURN-TO-SILENCE STOP

If valve is equipped with Turn-to-Silence equipment, the stop should be checked for proper adjustment after the building has been put into service. Unless pressure at the valve changes radically, the setting is permanent.

To set for minimum flushing noise, open Turn-to-Silence wide by turning counterclockwise with screwdriver or wheel handle. Trip the valve and note noise level. While valve is running, begin to close stop and slowly Turn-to-Silence. Depending on inlet pressure at any given fixture, there is one setting of the stop at which water noise will be hushed. If pressure is low, this optimum setting will be near the wide open stop position. If pressure is high, the setting will be near the closed position.

The gallonage demands of the fixture must also be satisfied. Adjustment of the No. 4 regulating screw in the valve cover may be helpful in this regard.

### HOW TO CARE FOR CHROMIUM PLATING

Chrome finishes on Delany material are of the highest quality obtainable. Each part is coated with a thick deposit of nickel, and finally chrome plated for lasting brilliance.

The life of chrome plate depends directly on the amount and type of maintenance provided. All chrome parts should be washed with a liberal amount of clear water and wiped dry with a clean cloth at least once a week. Valves subject to heavy traffic or aggressive atmospheres will benefit from more frequent cleaning. Uric acid and its fumes are harmful and will blacken and destroy chrome plate if left undisturbed for a period of time.

Caution should be taken to insure that no paste or powder cleaners are applied to chrome. Under no circumstances should bowl and urinal cleaners, most of which are acid solutions, be allowed to contact or splatter chrome plate. Such solutions can blacken and eat through chrome in a matter of hours.